

REMARKS

Double Patenting

The examiner rejected claims 1-13, 15-19, 24, and 25 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,661,794 ("Wolrich").

Applicants will consider submission of a Terminal Disclaimer upon an indication of allowable subject matter, but currently preserves its right to traverse the rejection.

35 U.S.C. § 102

The examiner rejected claims 1, 2, 6-8, 24, and 25 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,606,326 ("Herring").

Claim 1 recites a system comprising circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port.

The examiner cites the following passage in the contention that Herring describes the feature cited *supra* of claim 1:

To transfer a message chunk from any receiver into the central queue, each receiver has a separate eight-byte output (labeled 0.sub.Q) which is connected, via 64-bit bus 315, to a 64-bit data input (labeled IN) on central queue 350.¹

Nowhere in this passage does Herring describe anything about an order in which a first portion and a second portion of a network packet are enqueued. Herring, on the other hand, states:

The method includes: dividing the data packet into a sequence of multiple portions; forwarding the sequence of multiple portions from the input port to the output port through the central queue path; during the forwarding, determining that one portion of the multiple portions of the sequence comprises a critical portion; and switching forwarding of the sequence of multiple portions from the input port to the output port to the bypass path, the switching resulting in passing of the critical portion from the input port

¹ Herring, Column 12, Lines 35-38

to the output port through the bypass path irrespective of whether contention exists for the output port.²

Note that the existence of the critical portion in Herring, by its very definition, teaches away from the enqueueing of the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port, as recited in claim 1. That is, assume that the first portion was received at the first port first. By assigning the second portion of a network packet as a critical portion as may be done in Herring, the first portion and the second portion of the network packet would be enqueued in a different order than that received at the first port.

Herring neither describes nor suggests a system comprising circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port, as recited in claim 1. Independent claim 25 has features similar to claim 1. Accordingly, the rejection should be withdrawn.

35 U.S.C. § 103

The examiner rejected claims 3, 5, and 9-13 under 35 U.S.C. § 103(a) as being unpatentable over Herring in view of U.S. Patent No. 6,493,754 ("Rosborough").

Claims 3, 5, and 9-13 depend from claim 1. Herring was shown *supra* to neither describe nor suggest a system comprising circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port, as recited in claim 1. Rosborough was introduced by the examiner to cover the feature of program threads and therefore fails to remedy the deficiencies of Herring.

Herring and Rosborough, alone or in combination, neither describe nor suggest a system comprising circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port, as recited in claim 1, from which claims 3, 5, and 9-13 depend. Accordingly, the rejection should be withdrawn.

² *Id.*, Column 7, Lines 27-38

The examiner rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Herring in view of U.S. Patent No.6,226,680 ("Boucher").

Claim 14 recites a communication system comprising a sequencer to poll the one or more status flags and place the one or more status flags to the one or more registers over the bus, wherein the communication system is capable of processing one or more packets of data, and wherein the communication system is capable of maintaining an intra-packet order and an inter-packet order for the one or more ports.

The examiner cites the following passage in the contention that Boucher describes the feature cited *supra* of claim 14:

A packet control sequencer 176 oversees the fly-by sequencer 178, examines information from the media access controller 172, counts the bytes of data, generates addresses, moves status and manages the movement of data from the assembly register 174 to SRAM 182 and eventually DRAM 188.³

Nowhere in this passage does Boucher describe anything about the communication system is capable of maintaining an intra-packet order and an inter-packet order for the one or more ports. Boucher, on the other hand, states:

When a message packet or frame is received 47 from a network by the CPD, it is first validated by a hardware assist. This includes determining the protocol types of the various layers, verifying relevant checksums, and summarizing 57 these findings into a status word or words. Included in these words is an indication whether or not the frame is a candidate for fast-path data flow. Selection 59 of fast-path candidates is based on whether the host may benefit from this message connection being handled by the CPD, which includes determining whether the packet has header bytes denoting particular protocols, such as TCP/IP or SPX/IPX for example. The small percent of frames that are not fast-path candidates are sent 61 to the host protocol stacks for slow-path protocol processing.⁴

That is, Boucher classifies the message packets or frames as being a candidate for fast-path or slow-path data flow. Such a classification in fact teaches away from a communication system capable of maintaining an intra-packet order and an inter-packet order. Boucher neither describes nor suggests "a communication system is capable of maintaining an intra-packet order

³ Boucher, Column 9, Line 66 – Column 10, Line 4

⁴ *Id.*, Column 6, Lines 33-46

and an inter-packet order for the one or more ports", as recited in claim 14. Accordingly, the rejection should be withdrawn.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

In view of the foregoing, applicant respectfully submits that the application is in condition for allowance and such action is respectfully requested at the examiner's earliest convenience.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

The fee for the petition for extension of time is being paid concurrently on the electronic filing system by way of deposit account authorization. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket no. 10559-0132002.

Respectfully submitted,

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